Aug. 18, 1942. H. J. CLASPY 2,293,117

LIGHTING FIXTURE

Filed Jan. 7, 1941 2 Sheets-Sheet 1

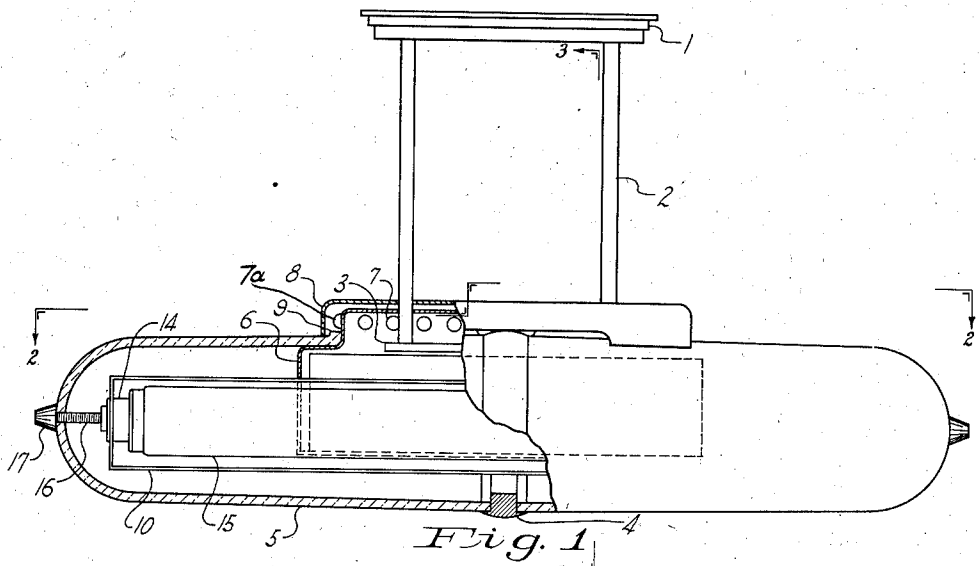


Fig. 1

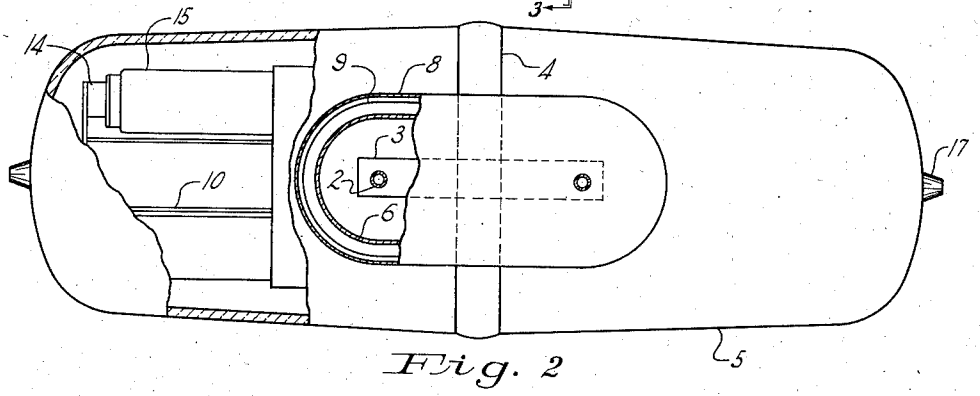


Fig. 2

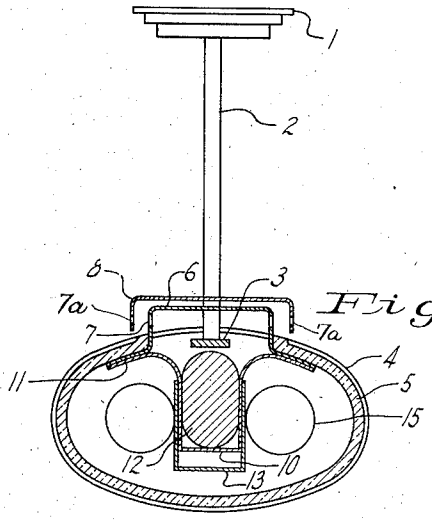


Fig. 3

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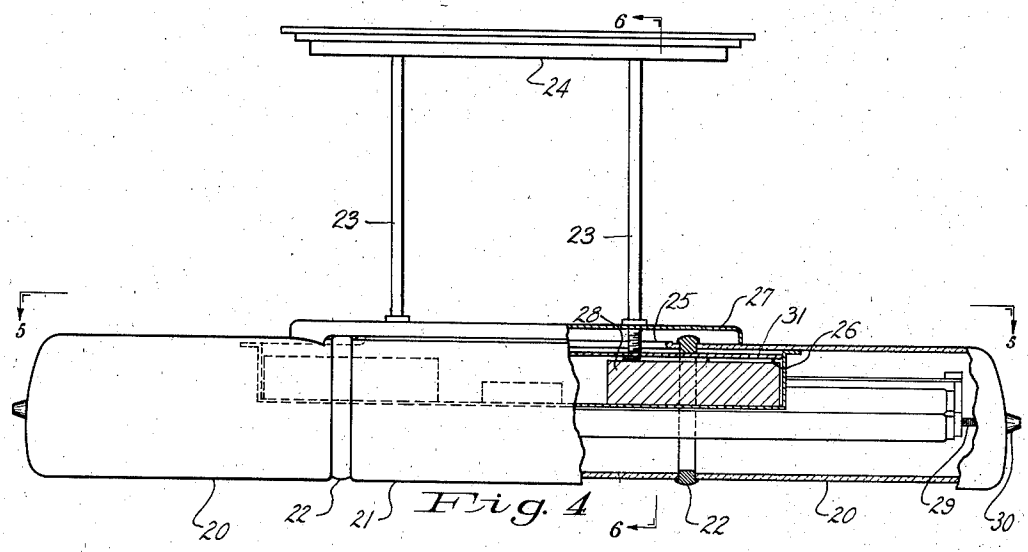


Fig. 4

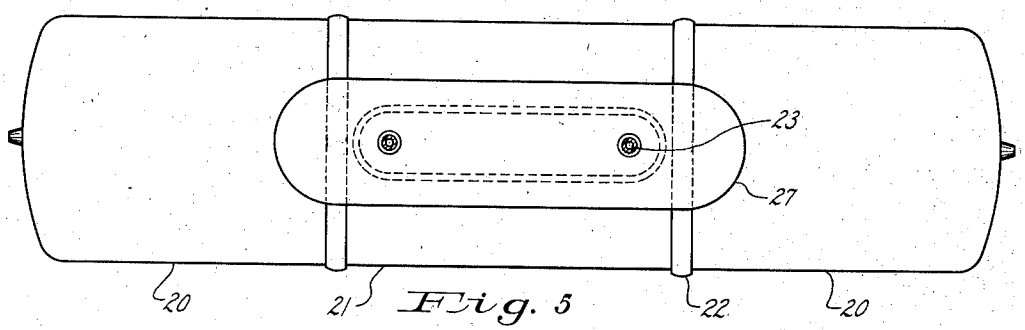


Fig. 5

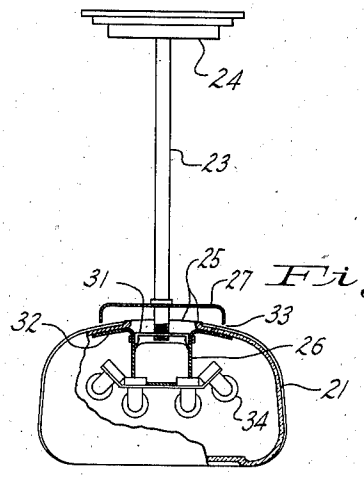


Fig. 6

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2,293,117

LIGHTING FIXTURE

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Application January 7, 1941, Serial No. 373,425

3 Claims. (Cl. 240—78)

This invention relates to new and useful improvements in lighting fixtures and mountings for lighting fixtures, for use in fluorescent lighting, and the present application is an improvement on my application serially numbered 354,037, filed August 24, 1940.

It is among the objects thereof to provide a lighting fixture unit for fluorescent lamps which is especially designed for ventilation, while at the same time sealing the fixture proper against the ingress of dust.

Fluorescent lighting requires a housing for a lamp ballast, such as transformer and circuit connections, which generate heat, whereas the lights themselves remain relatively cold.

In the hereinbefore mentioned application, the lamp ballast is housed within the glass shade so that the entire fixture is subjected to the heat of the ballast, the heat loss being by radiation through the walls of the fixture.

In accordance with the present invention, the ballast housing, although contained within the fixture, is open to the atmosphere for ventilation, while the shade is substantially sealed around the ballast housing.

The invention will become more apparent from a consideration of the accompanying drawings constituting a part hereof in which like reference characters designate like parts, and in which:

Fig. 1 is a side elevational view partially in cross-section of a lighting fixture embodying the principles of this invention;

Fig. 2 a top plan view partially cut away and in partial section, taken along the line 2—2, Fig. 1;

Fig. 3 a vertical cross-sectional view taken on the line 3—3, Fig. 1;

Fig. 4 a side elevational view partially in cross-section of a modified form of lighting fixture;

Fig. 5 a top plan view thereof taken along the line 5—5, Fig. 4;

Fig. 6 a vertical cross-sectional view taken along the line 6—6, Fig. 4.

With reference to Figs. 1 to 3 inclusive of the drawings, the structure therein illustrated comprises a ceiling canopy 1 having vertically depending conduits 2 joined to a horizontal strap 3 to which is attached a flanged ring 4 for receiving the ends of a pair of translucent lighting shade units 5, which are seated in flanges of the ring 4 and secured in a manner to be hereinafter described.

A box 6 for auxiliary equipment or ballast, having ventilating holes 7, is secured to the fixture supports 3 and 4, and a cover 8 may be provided, which is also provided with cut-out ventilations 7a simlar to those shown at 7 in the box 6. The half sections of shades 5 are cut-out in an oblong shape, as shown in Fig. 2, and are provided with a shoulder or bead 9 through which the box 6 projects, the shoulder 9 forming a seal with the box 6, as shown in Fig. 1, by a close fit therewith, and the cover 8 prevents the ingress of dust to the joint between the shoulder 9 and box 6.

As shown in Fig. 3, the cover 8 may have a clearance space with the shade 5 for ventilation instead of perforations, as the perforations 7 of Fig. 1. A channel 10, having flared sides 11, secured to the box 6, carries the auxiliary or ballast, which is designated by the reference numeral 12. A second channel 13, secured to the channel 10 is spaced from the latter to provide clearance under the ballast housing for wires that lead to the end terminals 14 of the fluorescent light tubes 15. The half sections of the fixtures are secured in abutting relation against the supporting ring 4 by means of end screws 16 that are fastened to the channel 10, the screws extending through perforations in the ends of the shades, and thumb nuts 17 interacting with the screws 16 abut the end faces of the shade sections.

In the modification shown in Figs. 4 to 6, inclusive, there are two end shade sections designated by the numeral 20, and a center section 21 mounted between flange supporting rings 22. The ballast box 26 is attached by a mounting plate 31 to suspension conduits 23 extending from a ceiling canopy 24.

In this construction the center shade section 21 is open at 25, Fig. 4, and the ballast box 26 is ventilated through this opening. A cover 27 is disposed over the opening 25 and is suitably perforated or cleared from the fixture to provide ventilation. Numeral 28 designates the auxiliary or ballast which is contained in the box 26, and the fixture assembly is secured in place by end screws 29 and thumb nuts 30.

The inner construction of the fixture of Figs. 4 to 6 is better shown in Fig. 6. The box 26 is provided with flared sides 32 that engage the under side of the section and help support the center fixture 21. The cover 27 is shown as provided with a clearance 33 for ventilation, and four flourescent lighting tubes 34 are mounted on end terminals of the box or channel member 26.

It is evident from the foregoing description of

this invention that lighting fixtures for fluorescent lighting made in accordance therewith house the light tubes and protect them against the accumulation of dust, while permitting free ventilation through the fixture bracket or ballast housing without seriously impairing the appearance of the structure.

The arrangement further provides a secure mounting for glass or plastic shades of substantial size, which can readily be attached and removed for cleaning and inspection of the light tubes. Also the construction lends itself to a mounting or cleaning of the fixture support with the glass shades entirely removed, thereby avoiding possibility of breakage.

Although several embodiments of the invention have been herein illustrated and described, it will be evident to those skilled in the art that various modifications may be made in the details of construction without departing from the principles herein set forth.

I claim:

1. A lighting fixture for fluorescent lamps comprising a supporting bracket, a flanged center ring attached to the bracket, a combined housing and channel for the lamp auxiliary or ballast secured to said bracket, end terminals carried by said channel for supporting fluorescent lamps, translucent shade sections having their inner ends abut the supporting ring and seated in the flanges of said ring; said shade sections having cut-out portions through which a portion of the ballast housing projects, vents in the projecting portion of said housing, a cover for the projecting portion of the housing, vents in said cover to provide circulation of air from the ballast housing and channel to the atmosphere, and fastening means attached to the end terminals and passing through the ends of the shade sections for holding the shade sections in place.

2. A lighting fixture for fluorescent lamps comprising a supporting bracket, a combined housing and channel for the lamp auxiliary or ballast secured to said bracket, end terminals carried by said channel for supporting fluorescent lamps, a sectional translucent shade housing said channel and terminals, supporting means attached to said bracket for abutting the ends of the shade sections, said shade having a cut-out portion, means in conjunction with said cut-out portion for venting the heat of the ballast, and means at the extended ends of the fixture for engaging the outer ends of the shade to draw the sections into abutting engagement with the supporting means.

3. A lighting fixture for fluorescent lamps comprising a supporting bracket, a combined housing and channel for the lamp auxiliary or ballast secured to said bracket, end terminals carried by said channel for supporting fluorescent lamps, translucent shade sections housing said channel and terminals, supporting means attached to said bracket for abutting the ends of the shade sections, said shade sections having cut-out portions in sealing engagement with a projecting portion of the housing, means for venting the heat of the ballast through the projecting portion of the housing and means at the extended ends of the fixture for engaging the outer ends of the shade sections to draw them into abutting engagement with the supporting means.

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